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Circle Time: An Exploratory Study of Activities and Challenging Behavior in Head Start Classrooms

Hasan Y. Zaghlawan · Michaelene M. Ostrosky

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Abstract The purpose of this descriptive study was to examine circle time activities in eight Head Start classrooms. A total of 7 h of observations occurred in eight classrooms. Songs and academic activities were the most frequently occurring activities. Challenging behavior during circle time also was examined. The three activities with the highest frequency of challenging behavior were roll call, discussion, and calendar routines. Limitations of the study along with implications for research and practice are presented.

Keywords Challenging behavior · Head Start · Circle time

Introduction

The impact of challenging behaviors on children's development and learning has resulted in a number of scholars seeking to understand and develop prevention and intervention programs to address these behaviors (Gilliam and Zigler 2001; Webster-Stratton and Hammond 1998). While numerous efforts to define challenging behavior exist, this research study was guided by a comprehensive definition offered by Smith and Fox (2003) which suggests that challenging behavior is "any repeated pattern of behavior, or perception of behavior, that interferes with or is at risk of interfering with optimal learning or engagement in prosocial interactions with peers and adults." (p. 6). Campbell, as cited by Stowe et al. 2000, reviewed a series of longitudinal studies focusing on preschoolers' behaviors and reported that at least 50% of preschool children continued to display conduct problems during subsequent school years, where 67% of these children qualified to be diagnosed with attention deficit hyperactivity, oppositional defiant behavior, or conduct disorder at age nine.

The majority of children served in Head Start programs are members of families who live in poverty. Some researchers (e.g., Keenan et al. 1997; Yoshikawa and Zigler 2000) reported a high percentage of challenging behavior in this population. Webster-Stratton and Hammond (1997) conducted an observational study in several Head Start classrooms and reported that one third of the children exhibited a problem behavior every 6 min. Researchers stated that more than one quarter of Head Start children display externalizing behavior problems to acute degrees (Harden et al. 2000; Webster-Stratton and Hammond 1998). Upon entering preschool, children are challenged to integrate into a novel social structure. Preschoolers learn about social norms and how to respect them. They are encouraged to be proactive participants in their environment by learning different roles and meeting classroom expectations. Building relationships is one of the core skills that children learn as they engage in various activities during the preschool day (Kantor et al. 1989).

In Head Start programs, the average preschool day is typically composed of two types of activities: teacher-directed structured activities (e.g., small group activity), and child-directed unstructured activities such as free-play. Circle time, a teacher-directed structured activity, occurs every day in most preschool classrooms. This event usually lasts 15–20 min, and may include several activities such as taking attendance, singing songs, and reading a book (Reich 1994).

H. Y. Zaghlawan (✉) · M. M. Ostrosky
University of Illinois at Urbana-Champaign, 1310 S. Sixth Street, Champaign, IL 61820, USA
e-mail: zaghlawa@illinois.edu

Circle time provides children with numerous learning opportunities, which can facilitate their transition to elementary school (Dodge and Colker 1992). Most of the instructions that take place in typical elementary school settings happen in a structure similar to circle time, where the teacher is leading the group and instructing the children through a variety of skills. During circle time, early childhood teachers typically attempt to teach some academic skills such as numbers, letters, seasons, and shapes. They also teach more subtle skills that will help children be successful in their later years such as listening, taking turns, and interacting positively with peers and adults (Gould and Sullivan 1999).

While circle time has the potential to include rich learning experiences, teachers and children appear to have different expectations and feelings about this activity. Wiltz and Klein (2001), for instance, observed and interviewed 122 preschoolers to gain insight into their experiences in preschool classrooms. Children in both high quality and low quality programs, as rated using the *Early Childhood Environment Rating Scale* (Harms and Clifford 1980) and the *Classroom Practices Inventory Scale* (Hyson et al. 1990), reported that they disliked circle time because it took too long. Offering a different perspective, Reich (1994) reported that preschool teachers viewed circle time as the only opportunity they had during the day to demonstrate that they were teaching their group of children in an elementary school fashion.

Collins and McGaha (2002) discussed how a lack of planning, flexibility, and reasonable expectations from teachers might result in a number of challenging behaviors during circle time, including temper tantrums, noncompliance, and leaving circle time. These authors stated that competent and confident teachers can prevent challenging behavior during circle time by having clearly understood expectations and using children's interests to create engaging circle time activities.

Researchers have shown that activity type impacts child behavior, with children engaging in more disruptive behaviors during teacher-directed structured activities (Qi and Kaiser 2004; Qi et al. 2006). Researchers also reported a main effect for activity structure when they studied children with identified behavior problems during teacher-directed structured and child-directed unstructured activities (Del'Homme et al. 1994). Results revealed that children engaged in more challenging behavior during structured activities. Thus, teacher directed activities might be a prime context for challenging behavior and an ideal setting for implementing prevention and intervention programs within preschool classrooms.

While many researchers have targeted circle time as a setting for intervention programs (e.g., Hudson 2000; Macy and Bricker 2007), the literature about circle time is sparse, with only a few research teams sharing their findings on circle time activities and the impact of this common activity on children's learning (Reich 1994; Wiltz and Klein 2001). The current study was conducted to address this gap in the research. Specific questions addressed in this exploratory study were: (a) What activities occur during circle time in Head Start preschool settings? and (b) How frequently does challenging behavior occur across activities within circle time?

Method

Participants

Eight teachers from a Midwestern area were recruited as participants from a larger study (Quesenberry et al. 2010), which focused on the relationship between Head Start programs' child guidance and behavior policies and procedures, and teachers' perceived levels of job satisfaction and competence, along with measures of children's social skills and challenging behaviors. The eight participants invited to participate in the current study attained the highest ($n = 4$ participants) and lowest ($n = 4$) scores on the *Teacher Efficacy Scale* (Gibson and Dembo 1984) in the Quesenberry et al. study. Prior to the onset of the current study, the first author communicated with these eight teachers to inform them of the purpose of the study and invite them to be a part of it. All eight teachers agreed to participate. All eight participants were head teachers in their respective Head Start preschool classrooms. The eight classrooms were affiliated with seven Head Start programs, where two of the classrooms were part of the same large Head Start program. In addition to teacher participants, all children enrolled in the eight classrooms were recruited for participation in this study. Consent forms were sent home to all parents by the classroom teachers informing them about the study and asking them to return the consent forms only if they did not want their children to participate. No consent forms were returned so all children in all eight classrooms were observed.

All teachers were females, and their experience in early childhood settings ranged from three to 16 years ($M = 9$ years). All eight teachers had been in their current job placements for at least three years ($M = 5$ years). One teacher had a four year college degree, another teacher had completed some college, and the other six teachers had two year degrees. Teachers were ethnically diverse (i.e., Caucasian, Hispanic, Pacific Islander, Mexican–American). The number of children in each circle time ranged from 15 to 20; the mean number of children per circle time observation session was 18. Only one teacher did not have a teaching assistant, while the other teachers had at least

one teaching assistant who was available on a daily basis (range = 0–3 teaching assistants).

Setting

The 24 observations were conducted in Head Start classrooms. The head teachers of the eight classrooms were asked when circle time occurred in their schedules and how long it lasted. Each circle time area was equipped with a carpet typically decorated with a border that included drawings of geometric shapes, animal pictures or numbers in different colors. During circle time, teachers directed students to sit on these drawings. One of the eight classrooms did not have a specific circle time carpet, but rather the students sat on the carpeted floor in rows.

The head teacher typically sat in front of the students who were arranged in a semicircle. Five of the teachers sat on chairs, while three teachers sat on the carpet as they conducted circle time. On the wall behind the teacher there was an attendance board, calendar, a board delineating classroom rules, a pointer, markers, and several cards labeled with the days of the week, months, seasons, and pictures of weather conditions (i.e., windy, sunny, rain). In three classes, a reward system board also was visible. The circle time area was bordered by cabinets, which contained classroom supplies. The teaching assistants typically sat outside of the circle behind the preschoolers.

Procedures

All observations were conducted in Head Start classrooms during typical circle time activities. Observers utilized a partial interval time sampling system, which involved recording the type of activity and the presence or absence of challenging behavior during each interval (Kazdin 2001). In this coding system, the circle time observations started when the head teacher began the first activity of circle time. The first author pilot tested the coding system in an early childhood setting on three separate occasions, and made adaptations based on these observations. The early childhood setting, teachers, and children who participated in pilot testing did not participate in the current study.

Three circle time observations were conducted in each of the eight classrooms, with the length of each observation dependent on the length of circle time in each classroom. The three circle time observations per classroom were conducted on different days of the week for each classroom. It took 1 to 3 weeks to complete the three observations in each classroom. Only one observation was conducted per day in any given classroom, however on some days two to three different classrooms were observed consecutively. For each observation session, the observer recorded the type of activity, the number of adults and children present, and the presence or absence of challenging behavior. The observer recorded the activity type, and the occurrence of challenging behaviors every 10 s.

A digital recorder with head phones was used to prompt the observer every 10 s to record the activity that was taking place, and the occurrence/nonoccurrence of challenging behavior. Data were recorded by hand on a data sheet developed by the authors. The definition of challenging behavior by Smith and Fox (2003) provided above was used to guide this study. This definition was adopted by The Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI; http://www.challengingbehavior.org/index.htm) to identify challenging behaviors and develop evidence-based practices to improve the social and emotional behaviors for young children. This definition also was adopted for use in the current study because it defines challenging behaviors based on their effects, and not adult perceptions.

Measures

Observational Coding System

The coding system used for this study included 10 activities. A group of graduate students with expertise in early childhood and early childhood special education and who completed their practicum in various early childhood programs, including Head Start settings, were asked to generate a list of activities typically observed during circle time in preschool classrooms. The list of generated activities was revised and refined by the authors to include definitions, examples, and non examples (see Table 1 for observational definitions). The coding system of activities was pilot tested by the authors on three different days in an early childhood classroom, which was not included in the study.

Teacher Impression of Circle Time Survey (TICTS)

The eight teachers completed a survey about circle time, following each of the three observation sessions. The purpose of the *TICTS* is to understand teacher perceptions of the occurrence of challenging behavior (see Table 2 for the survey). The *TICTS* was pilot tested with one teacher who did not participate in the current study; the survey then was revised. The *TICTS* enables teachers to show their thoughts about the occurrence of challenging behavior, the type of strategies they used to handle or to prevent challenging behaviors, their general feeling about the success of circle time, and how challenging behavior impacted them and their students during circle time.

Table 1 Operational definitions of circle time activities

Behavior	Definition	Example	Non-Example
Academics	Discussion about different academic topics like numbers, letters, shapes, and colors	The children are learning new words that start with the letter H	Child sings the alphabet song
Calendar	Activities that involve the calendar and conversations about the date/week/month/year etc	The teacher asks the children what day it is	The teacher illustrates changes that have occurred to the weather during the past two days
Center preview	A transition activity, where the teacher informs the children of the various activities taking place in the different stations	The teacher explains what activities are available for children to work on today	The teacher reads the titles of the books available for children to read in the reading center
Discussion	Conversations around topics not related to the curriculum, such as weekend activities	The teacher asks the children: What did you do over the weekend?	The teacher models for children how they should share toys during center time
Reading books	The teacher reads a book to children and has a conversation with the children about it	The teacher reads a book to the children	The children share information about the books they read with their parents at bed time
Roll call	Checking who is absent and who is present that day	The teacher asks the children to find their name sticks	The teacher asks the children to count with her from 1–10
Social emotional	Activities that involve talking and discussing different feelings and emotions that children express in daily life activities, conflicts, resolutions, friendship skills	The teacher asks the children to show their smiley faces	Children discuss why a classmate was crying that morning during a hello activity
Songs	The teacher and children sing a song that is not part of an academic theme or social/emotional topic	The teacher starts singing and asks the children to sing with her	The teacher and children discuss how some children have high voices while others have low, deeper voices
Weather	Activities that involve the weather and conversations about temperature/rain etc	The teacher asks a child to look out the window and report the weather	The children are talking to one another about how green the trees are during spring
Unspecified	Activities that do not fit in any of the above categories	The teacher ties one child's shoe while the other children watch	The children listen to the teacher, while she reads a book to them

Table 2 Teacher impression of circle time survey

1. How often did challenging behaviors occur during today's circle time?	Never[a]	Rarely	Fairly often	Very often
2. If challenging behaviors occurred, how effective were you in handling them?	Not at all effective	Slightly effective	Moderately effective	Very effective
3. How much did challenging behaviors disrupt circle time for **you** today?	Not at all	A little	A lot	A great deal
4. How much did challenging behaviors distract **other children** today?	Not at all	A little	A lot	A great deal
5. How successful was circle time today?	Very successful	Moderately successful	Slightly successful	Not at all successful
6. What strategies did you use today to **handle** challenging behaviors? Please list/describe all				
7. What strategies did you use today to **prevent** challenging behaviors? Please list/describe all				

[a] If your answer is **Never**, please complete question 5 and question 7

Inter-Observer Agreement

Inter-observer agreement on circle time observations were assessed using a point-by-point agreement ratio (Kazdin 2001), whereby agreement on occurrences and nonoccurrences of challenging behavior was divided by agreements plus disagreements and then multiplied by 100. Inter-observer agreement on circle time activities also was assessed using a point-by-point agreement ratio, whereby agreement on occurrences of each activity was divided by

agreements plus disagreements and then multiplied by 100. The first author served as the primary observer, and the second author served as the reliability coder. The second observer was trained to utilize the observational recording instrument in a setting that was not used in this study. Inter-observer agreement was assessed on 21% of all observations with reliability data gathered in 6 of the 8 classrooms. The mean reliability for circle time activities was .87 (range = .76–.97). The observers had the highest inter-observer agreement during songs and roll call, and the lowest inter-observer agreement during center preview. When coding the presence and absence of challenging behaviors, the mean inter-observer agreement was 94.6 (range = .92–.98).

Results

This descriptive study was conducted to identify the types of activities that take place during circle time in Head Start preschools, and to investigate the occurrence of challenging behavior during these activities. Three observations were conducted in each of eight classrooms for a total of 24 observations. Approximately 7 h of observational data were gathered in the eight classrooms across 21 days. Individual circle time observations ranged from eight to 40 min ($M = 17$ min).

The first research question pertained to the types of activities that occur during circle time. Teachers were observed conducting several activities including discussion, calendar, center preview, songs, weather, roll call, academics, book reading, and unspecified activities. The activity that dominated circle time across the eight classrooms was singing ($M = 36\%$ of observed intervals), while activities such as academics and reading books accounted for a moderate amount of circle time (see Table 3 for individual classroom and overall mean percents). Activities such as weather and center preview occurred much less often than the other activities, and there were no activities observed that focused entirely on social emotional skill development (see Table 4 for data on the three observations per classroom).

The second research question addressed the occurrence of challenging behavior across activities within circle time. The mean percent of intervals of challenging behavior across all observations in the eight classrooms was 30%, but this percent varied considerably in terms of activity (see Table 5). Challenging behaviors were displayed most often during roll call with preschoolers engaging in challenging behaviors during 64% of all roll call intervals. Challenging behaviors were observed least often during book reading, songs, and center preview ($M = 21\%$ of all intervals in which book reading, songs, and center preview were observed).

The average length of circle time for all 24 observed sessions was 17 min, with seven sessions in three classrooms having some longer circle time sessions. The mean percentage of intervals of challenging behavior across circle times that lasted longer than 17 min ($n = 7$ observations) was 46%, while the mean percentage of intervals of challenging behaviors during circle times that lasted 17 min or less ($n = 17$) was 31%. More specific data from the seven observations that were longer than 17 min showed that the percentage of intervals during which challenging behavior was observed post the 17 min mark was low (i.e., 0, 0, 8, 10 11, 12, 26%).

Data from the *TICTS* ($n = 24$ surveys; one per observation day per teacher) revealed that the majority of teachers rated the occurrence of challenging behavior during circle time in the middle on a four-point scale (rarely and fairly often). According to the eight teachers, challenging behavior had little impact on their circle time activities, and challenging behavior did not distract other students in the group. Overall, most teachers felt that they were moderately successful in running circle time.

The second part of the *TICTS* elicited open-ended responses from teachers about the prevention and intervention strategies they used during circle time to keep children engaged and to support their learning. The 15 prevention strategies shared by the eight teachers (across the 24 surveys) were categorized into two groups (see Table 6). Some of these strategies ($n = 3$) were used prior to conducting circle time such as adopting a clear and simple routine to structure the flow of activities during circle time and explain the routine to children, planning for smooth transitions between activities, and conducting circle time within a reasonable time frame. Other strategies ($n = 12$) were used during circle time such as purposefully arranging children's seats to keep children with challenging behaviors apart, reminding the children about classroom rules and expectations, using motivators to keep children engaged, and asking the teaching assistant to sit next to a child with challenging behavior.

The eight teachers also reported using 15 strategies to intervene with children with challenging behaviors (see Table 7). The first group of 12 strategies included those that focused on children learning and being reminded of classroom rules and expectations, or teachers calling children's names, and redirecting their attention to the activity. The other group of three prevention strategies included those the teacher and teacher assistants used to help children stay engaged. For example, a teacher might sit near a child with challenging behavior, talk in private with the child, or remove the child from circle time.

Table 3 Mean percentage of intervals of activities across all observations for all classes

Activity	Class A	Class B	Class C	Class D	Class E	Class F	Class G	Class H	Across all classrooms
Songs	18	64	49	38	42	47	26	0	36
Unspecified	10	11	11	21	14	13	30	20	16
Academics	0	23	39	13	22	14	3	3	15
Reading books	0	0	0	31	18	0	0	38	11
Discussion	12	2	1.3	7	2	5	29	2	8
Calendar	25	0	0	0	0	5	0	23	7
Roll call	24	0	0	0.3	0	10	8	0	5
Weather	11	0	0	0	0	0	0	12	3
Center preview	0	0	0.7	0.3	2	6	3	0.3	2
Social emotional	0	0	0	0	0	0	0	0	0

Zero percentages mean the activity did not occur

Table 4 Percentage of intervals of activities across all observations for all classes

Activities	Class A	Class B	Class C	Class D	Class E	Class F	Class G	Class H
Songs	15	55	39	52	56	40	12	0
	16	70	32	46	58	53	33	0
	22	68	75	17	12	47	34	0
Unspecified	8	7	5	27	18	7	14	47
	10	10	2	15	9	18	43	8
	11	16	25	20	16	14	32	6
Academics	0	36	52	0	2	25	10	8
	0	17	64	5	12	5	0	0
	0	16	0	33	53	12	0	0
Reading books	0	0	0	34	16	0	0	0
	0	0	0	33	20	0	0	58
	0	0	0	25	19	0	0	57
Discussion	24	3	4	10	5	5	74	6
	12	3	0	5	0	0	5	0
	1	0	0	5	0	10	8	1
Calendar	24	0	0	0	0	0	0	24
	26	0	0	0	0	12	0	22
	24	0	0	0	0	3	0	24
Roll call	21	0	0	1	0	17	0	0
	26	0	0	0	0	2	9	0
	26	0	0	0	0	10	16	0
Weather	8	0	0	0	0	0	0	15
	10	0	0	0	0	0	0	11
	16	0	0	0	0	0	0	11
Center preview	0	0	0	1	3	5	0	0
	0	0	2	0	1	10	10	1
	0	0	0	0	0	4	0	0

Zero percentages mean the activity did not occur

Thus, data revealed that the eight teacher participants focused on some circle time activities such as songs and academics more often compared to other activities such as discussion, and calendar. Additionally, these teachers did not conduct any specific activities during circle time that were geared toward nurturing preschool children's social and emotional development. Most of the teachers believed that their circle times were successful with infrequent occurrences of challenging behaviors. The teachers described several strategies they used to prevent challenging behavior along with other strategies used to intervene on challenging behaviors when they occurred.

Table 5 Frequency and percentage of intervals of challenging behaviors across activities for all classrooms

Activity	Class A	Class B	Class C	Class D	Class E	Class F	Class G	Class H	Frequencies across all classrooms (percents)
Roll call	62/75 (83%)	0	0	0/1 (0%)	0	0/22 (0%)	9/13 (69%)	0	71/111 (64)
Discussion	22/40 (55%)	1/6 (17%)	0/4 (0%)	12/31 (39%)	2/8 (25%)	0/11 (0%)	34/43 (79%)	2/5 (40%)	73/148 (49)
Calendar	46/77 (60%)	0	0	0	0	0/11	0	12/49 (24%)	58/137 (42)
Unspecified	22/30 (73%)	1/27 (7%)	5/19 (26%)	27/74 (36%)	34/89 (38%)	3/29 (10%)	35/48 (73%)	10/40 (25%)	137/356 (38)
Academics	0	9/62 (15%)	28/112 (25%)	13/60 (22%)	86/158 (54%)	2/32 (6%)	2/5 (40%)	3/5 (60%)	143/434 (33)
Weather	15/33 (45%)	0	0	0	0	0	0	3/26 (12%)	18/59 (31)
Reading books	0	0	0	33/117 (28%)	22/115 (19%)	0	0	11/86 (13%)	66/318 (21)
Songs	31/53 (58%)	22/168 (13%)	25/104 (24%)	44/174 (28%)	38/245 (16%)	7/105 (7%)	20/42 (48%)	0	187/891 (21)
Center preview	0	0	0/2 (0%)	1/3 (33%)	0/6 (0%)	0/15 (0%)	6/6 (100%)	0/1 (0%)	7/33 (21)
Mean percent									754/2,487 (30)

Zero percentages mean challenging behavior did not occur

Discussion

The aim of this study was to explore circle time activities in Head Start classrooms as well as the frequency of challenging behavior during these activities. The eight Head Start teacher participants varied in terms of the activities they focused on during circle time across all eight classrooms. Fox et al. (2003) highlighted that developing responsive relationships with children is a critical component of high quality teaching; early childhood teachers are encouraged to engage in daily conversations with the students in their care. Early childhood teachers usually spend some part of circle time on large group sharing (e.g., discussion) to teach numerous social communicative skills such as responding to questions, listening, asking questions, turn taking, and sequencing events in retelling a story. Our findings indicate that while some teachers devoted a portion of circle time to engage in conversations with children about real world experiences that happened in children's lives outside the classroom, a high occurrence of challenging behavior was observed during discussions. It is clear that teachers need to structure this part of circle time carefully, and implement prevention and intervention strategies to keep children engaged and attentive if discussion time is to be beneficial.

The Division of Early Childhood (DEC) of the Council for Exceptional Children emphasizes that preschool routines should be structured to promote play, friendships, engagement, and responsiveness (Sandall et al. 2005). One of the other key findings from this study was that singing songs, a highly engaging activity for most young children, was the most frequently occurring activity during circle time. A study conducted by Denac (2008) reported a similar finding, where singing songs was one of the favorite activities for kindergarten children in school and at home. Denac also found that preschool teachers showed more interest in singing songs. Although data in the current study were not collected on the kind of songs that were sung, field notes indicated that songs could be categorized into two types. First, some songs were academic in nature, teaching children about numbers, letters, colors, English as a second language, and body parts. Teachers appeared to utilize songs to teach these concepts, because songs were an engaging vehicle for introducing this information. One can speculate that presenting academic concepts to children through songs made it possible for them to learn this information, and hopefully retain and retrieve it in the future (Register 2001; Standley and Hughes 1997).

The second group of songs focused on social interaction and relationship building. Teacher participants often started circle time with a song aimed at building community in terms of relationships between children, and between children and the Head Start program staff. For example, the

Table 6 Preventive strategies to avoid challenging behaviors

Prior to circle time	During circle time
Having a routine and clear schedule	Proximity
Plan for smooth transitions	Teacher assistant helps children with challenging behaviors
Limit the length of circle time	Teacher/teacher assistant talks to children
	Arrange where the children sit
	Remind children of expectations
	Encourage participation
	Call names
	Use redirection
	Keep the children engaged with the task
	Have the children engage in physical activities
	Use motivators
	Incorporate Conscious Discipline

Table 7 Intervention strategies to address challenging behaviors

Child-focused strategies	Adult-focused strategies
Explain the teacher's expectations	Proximity
Remind the children of expectations, use general reminders	Teacher assistant intervenes
Redirect children to the task	Teacher/teacher assistant talks to the child
Complete some physical activities	
Give the child choices	
Remove the children from the circle time	
Use positive reinforcement	
Call names	
Time out without doing a task	
Ignore the behavior	
Rearrange children's seating arrangement	
Approach the children	

same song about being a family was sung regularly by teachers in three of the eight Head Start classrooms. These songs emphasize friendship, unity, and membership among a group of children. Thus, teachers used songs to teach social and emotional expressions and gestures like shaking hands and using greeting words. These findings support research by Dodge and Colker (1992) and Gould and Sullivan (1999) who emphasized that circle time is a place where teachers attempt to teach many important academic concepts and also subtle social and conversational skills. Songs provided children with opportunities to join together as a group and while no circle time activities were observed that met our conservative definition of social emotional activity it did appear that some aspects of singing were intended to support social emotional development. Songs were one of the activities during which children engaged in the least amount of challenging behaviors (see Table 5).

Another issue that emerged from the current study is that circle time, as a teacher-directed structured activity, can be a prime context for challenging behaviors. These findings support research by Qi and Kaiser (2004), which indicated that children displayed more disruptive behavior during structured activities than during unstructured activities. Given the national emphasis on promoting social emotional competence, preventing challenging behavior, and supporting teachers in mastering classroom guidance strategies, it is disturbing to see that in the current study 30% of all observational intervals included challenging behavior. However, this percentage is consistent with what has been reported by other researchers. For example, Anderson (1983) conducted several studies with children from low income families and found that the incidence of problem behavior among this population was higher than 31%. Additionally, in a study with 426 children, Webster-Stratton and Hammond (1998) reported 30% of observed children were engaged in high rates of aggressive and noncompliant behaviors with teachers and peers.

While the definition of challenging behavior used in the current study was broad and no attempt was made to identify specific behaviors that occurred frequently, the activity with the highest percent of intervals of challenging behavior was roll call. During roll call teachers usually checked attendance and let one child count and record the number of children present and absent. Data indicated that each of the 24 circle time sessions included 15–20 children, which meant that in some classrooms children had to count many peers during a typical roll call episode. Teachers usually provided verbal or physical prompts to support individual children in counting, and consequently, other children were apt to become disengaged and display challenging behavior while waiting for the roll call episode to end. Researchers have found that group behavior management strategies improve children's behavior by addressing problems and expectations as a group, and with the least amount of involvement from the teacher. Strategies like choral responding could be an effective method for increasing child engagement, decreasing disruptive behavior, providing more opportunities for all children to participate, and building confidence in low achieving children (Heward et al. 1989). Using choral responding during an activity such as roll call would decrease the amount of time, where children sit passively waiting for a peer to count all the children who are present. Additionally, as early childhood teachers have been encouraged to

reconsider the value of calendar activities during circle time (Beneke et al. 2008), a critical reconsideration of roll call also is needed.

A final issue that emerged from the current study is the importance of considering children's learning needs, and planning circle time activities around children's interests, strengths, and limitations. Some teachers were sensitive to children's waning interests during circle time. Such teachers switched activities once they realized that children were not engaged. For example, one Head Start teacher was observed using periodic "stress relievers" such as asking the children to imagine that they were blowing a balloon and then letting it go. This short break enabled the children to do something active then refocus their attention. These types of short transition activities within the large routine of circle time are beneficial in helping children reorient to the activities at hand, and decrease challenging behavior. Circle time, as a rich learning event in preschool, can be transformed from a challenging event for teachers and a less popular activity for children, into one that meets children's interests and respond to their needs.

Limitations and the Need for Future Research

Several caveats must be discussed regarding this descriptive study. It could be argued that having unfamiliar observers present during circle time impacted teacher and child behaviors. Although the teachers did not know exactly why they were recruited to participate in this study, they may have felt unsure of their skills as they were observed during large group time by unfamiliar individuals. In addition, completing the *TICTS* after each observation may have influenced teachers' behaviors in subsequent observations. Future research should include less intrusive methods to obtain valid images of teacher and child behavior during circle time.

Also, the amount of data gathered might not be adequate to thoroughly represent children's behaviors during circle time. Doll and Elliot (1994) suggested 50 min of observation over 2–3 weeks using 10-min observations sessions. This type of data gathering was impossible given the location of Head Start programs across the state. However, one strength of the current study is that circle times were observed for as long as they lasted in each classroom, with three observations conducted in eight different classrooms on different days of the week.

Third, in this descriptive study, an attempt was made to look at relationships between circle time activities and the occurrence of challenging behaviors. Future researchers should use additional measures to look at relationships between challenging behavior, preschool activities, child engagement and waiting time, and teacher competencies. These measures might include behavioral checklists, language tests, and teacher competency scales. Based on the current study, the structure of circle time appears to impact the frequency of challenging behavior and experiences that children have in Head Start preschools. Additional research is needed to pinpoint critical teacher, environmental, and child characteristics that impact preschoolers' circle time behavior. For example, gathering additional demographic data may help researchers identify moderating variables that impact circle time.

In the current study, challenging behaviors were coded as a single variable (occurrence/nonoccurrence) based on the definition coined by Smith and Fox (2003). Future research should include a more detailed coding system to better understand the variety of challenging behaviors that occur during circle time. Additional observational studies are needed to investigate specific teacher and child behaviors, which precede and follow challenging behaviors. Such studies could help researchers understand relationships between challenging behaviors and other variables, and help researchers and practitioners plan effective intervention programs.

Given the high prevalence of challenging behavior observed during circle time in the current study and the prevalence data on challenging behavior in general (Webster-Stratton and Hammond 1998; Yoshikawa and Zigler 2000), early childhood teachers might benefit from focused training and coaching on evidence-based practices known to prevent and address challenging behaviors. This supports research highlighting strategies to address challenging behavior as a critical professional development need (Strain and Joseph 2004). Additionally, professional development opportunities need to engage teachers in discussions about culturally based perceptions of challenging behaviors and the impact of challenging behavior on the classroom environment. Training also is needed to help teachers critically evaluate circle time as a common early childhood activity, their philosophy, and practice. As Reich (1994) stated, circle time is a primary setting where teachers demonstrate teaching skills like elementary school teachers, yet circle time should be an activity where preschoolers can learn and share experiences that support development across domains.

The eight Head Start teachers in the current study varied in terms of the activities they focused on during circle time. Data suggest that circle time, a teacher-directed structured activity, can be a prime context for challenging behaviors. Although our findings extend the early childhood literature by providing insights about circle time, future research is warranted to investigate what children actually learn during circle time, and how that impacts their development. Researchers and practitioners also are encouraged to think critically about whether circle time routines can be replaced or enhanced by other activities that might meet

children's needs and interests in more efficient ways. In the meantime, researchers and teacher educators should carefully consider their suggestions when advising early childhood teachers about what circle time should look like, what activities should be included, and what expectations they should have for children who participate in this activity during the typical preschool day.

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